

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 2, lines 18 – 24 with the following amended paragraph:

According to one aspect of the present invention there is provided an interface connectable as a default host interface to a peripheral or as a default peripheral interface to a host, for serial data communication between a host and a peripheral during a session, and comprising: automated means for periodically checking a connection by periodically starting a session when connected as a default host interface and automated means for periodically checking a connection by periodically requesting a session when connected as a default peripheral interface.

Please replace the paragraph beginning at page 2, line 26 and ending at page 3, line 1 with the following amended paragraph:

According to another aspect of the present invention there is provided an interface, for serial data communication between a host and a peripheral, the interface connectable as a default host interface or as a default peripheral interface and comprising: a power signal contact; at least one data signal contact; transmission means for repeatedly sending a poll signal via the power signal contact; and reception means for receiving a reply signal via the power signal contact [[,]] if the device interface is connected as a default peripheral interface, and the data signal contact if the device interface is connected as a default host interface.

Please replace the paragraph at page 3, lines 4 – 12 with the following amended paragraph:

According to another aspect of the present invention there is provided a host interface, for serial data communication between a host and a connected peripheral during a session, the host interface comprising: a power signal contact for supplying power to the connected peripheral; at least one data signal contact for serially communicating data between the host and connected peripheral; and means for periodically checking the for disconnection to from the peripheral comprising: transmission means for repeatedly sending a poll signal via the power signal contact; and reception means for receiving a reply signal via the data signal contact; and detection means for detecting the absence of a reply signal and the disconnection of the peripheral.

Please replace the paragraph at page 3, lines 14 – 22 with the following amended paragraph:

According to another aspect of the present invention there is provided a peripheral interface, for serial data communication between a connected host and a peripheral during a session, the peripheral interface comprising: a power signal contact for receiving power from the connected host; at least one data signal contact for serially communicating data between the connected host and peripheral; and means for periodically checking the for disconnection to from the host comprising: transmission means for repeatedly sending a first poll signal via the power signal

contact and for repeatedly sending a second poll signal via the data signal contact; and reception means for receiving a reply signal via the power signal contact; and detection means for detecting the absence of a reply signal and the disconnection of the peripheral.

Please replace the paragraph at page 4, lines 1 – 7 with the following amended paragraph:

According to another aspect of the present invention there is provided a method of checking a serial data connection between a dual mode device and another device, comprising: periodically starting a session at the device connected as host when the dual mode device is connected as a default host; and periodically requesting the start of a session at the device connected as a peripheral when the dual-mode device is connected [[a]] as a default peripheral.

Please replace the paragraph at page 5, lines 15 – 24 with the following amended paragraph:

The A/B interface 12 of the dual-mode device 2 comprises a USB transceiver 14 and five pin contacts. The first pin contact 40 (Vbus) is used to provide power from the A-device to the B-device. The second pin contact 42 (D+) and the third pin contact 44 (D-) are used as differential data lines for transmitting data between connected devices. The fourth pin contact 46 (GND) is used as an earth or ground. The fifth pin contact 48 (ID) is used to detect, in the dual mode device 2, whether it is

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connected to a mini A-plug or a mini B-plug. A mini A-plug connects, when inserted, the fourth pin contact 46 (GND) (ID) to the fifth pin contact 48 (ID) (GND) via a resistor. A mini B-plug, when inserted, leaves the fifth pin contact 48 (ID) fourth pin contact 46 (ID) isolated.

Please replace the paragraph at page 6, lines 22 – 29 with the following amended paragraph:

The A/B-interface 12 monitors the second pin contact 42 and the third pin contact 44 and detects when a pull-up resistor transistor 24 is connected to the second pin contact (D+) or the third pin contact (D-). Enumeration may then occur. This is the process described in the USB specifications by which the second device 4 is allocated an address and data is sent from the second device 4 to the default host device 2 that identifies the capabilities of the second device and enables communications between the first device 2 and the second device 4.

Please replace the paragraph at page 7, lines 18 – 26 with the following amended paragraph:

Another solution is to provide additional additionally hardware (not shown) that controls the periodic opening and closing of the switch 16. The hardware would be initiated by the controller 30. The hardware then periodically polls on Vbus at a rate specified by the controller 30. The USB transceiver can, after initiating the hardware, enter a sleep mode while the hardware manages auto-detection of

(dis)connection. The hardware monitor the data lines D for a response to a poll signal on Vbus and when a response is detected it sends an interrupt to the controller 30 to wake it from its sleep mode. This allows the controller 30 to remain in a sleep state for longer, saving power.

Please replace the paragraph at page 9, lines 1 – 10 with the following amended paragraph:

The A/B interface 112 of the first dual-mode device [[2]] 102 comprises a USB transceiver 114 and five pin contacts. The first pin contact 140 (Vbus) is used to provide power from the A-device to the B-device. The second pin contact 142 (D+) and the third pin contact 144 (D-) are used as differential data lines for transmitting data between connected devices. The fourth pin contact 146 (GND) is used as an earth or ground. The fifth pin contact 148 (ID) is used to detect, in the first dual mode device 102, whether it is connected to a mini A-plug or a mini B-plug. A mini A-plug connects, when inserted, the fifth pin contact 148 (ID) to the fourth pin contact 146 (GND) via a resistor. A mini B-plug, when inserted, leaves the fifth pin contact 148 (ID) isolated.

Please replace the paragraph starting at page 9, line 26 and ending at page 10, line 1 with the following amended paragraph:

The SRP is defined in the OTG supplement. The USB transceiver [[14]] 114 turns on the switch 117 to connect D+ to the pull-up resistor 118, it then turns off the

switch 117 to disconnect D+ to the pull-up resistor 118, it then turns on the switch 115 to connect Vbus to the pull-up resistor 116 and then turns off the switch 115 to disconnect Vbus [[to]] from the pull-up resistor 116. This sequence of alternately pulsing D+, then Vbus lasts for less than 100ms and is repeated periodically. This period is of the order one second. However, it may be varied.